

1. (Amended) A method for producing an RNA-loaded antigen presenting cell (APC) that presents on its surface a tumor antigenic epitope encoded by RNA of a tumor, wherein the epitope induces T cell proliferation, said method comprising:

C' introducing into an antigen-presenting cell *in vitro* RNA of a tumor comprising tumor-specific RNA that encodes an antigen that induces T cell proliferation and tumor immunity, thereby producing an RNA-loaded APC that presents on its surface a tumor antigenic epitope encoded by the RNA of the tumor, wherein the epitope induces T cell proliferation.

6. (Amended) The method of claim 1, wherein said RNA comprises poly A⁺ RNA.

7. (Amended) The method of claim 1, wherein said RNA comprises cytoplasmic RNA.

C² 9. (Amended) The method of claim 1, wherein said RNA is provided as a fractionated tumor extract that is fractionated with respect to a non-RNA component of the tumor extract.

14. (Amended) The method for treating a tumor in a patient, said method comprising administering to the patient a therapeutically effective amount of the RNA-loaded APC of claim 13.

15. (Amended) The method of claim 14, wherein the RNA is obtained from said patient.

16. (Amended) The method of claim 1, wherein the RNA is obtained from fixed tissue.

17. (Amended) The method of claim 14, wherein the RNA is obtained from a donor patient.

19. (Amended) An isolated CTL produced by the method of claim 18.

Cancel claims 20-24 and add claims 54-58 in lieu thereof.

25. (Amended) The method of claim 1, wherein the RNA is obtained from a melanoma.

26. (Amended) The method of claim 1, wherein the RNA is obtained from a bladder tumor.

C⁶
27. (Amended) The method of claim 1, wherein the RNA is obtained from a tumor selected from the group consisting of a breast cancer tumor, a colon cancer tumor, a prostate cancer tumor, and an ovarian cancer tumor.

C⁹
30. (Amended) The method of claim 1, wherein said RNA comprises nuclear RNA.

C⁸
33. (Amended) A method for producing an RNA-loaded antigen presenting cell (APC) that presents on its surface a pathogen antigenic epitope encoded by the RNA, wherein the epitope induces T cell proliferation, said method comprising:

introducing into an antigen-presenting cell in vitro RNA of a pathogen consisting essentially of RNA encoding a pathogen antigen that induces T cell proliferation and an immune response to the pathogen, thereby producing an RNA-loaded APC that presents on its surface a pathogen antigenic epitope encoded by the RNA, wherein the epitope induces T cell proliferation.

36. (Amended) The method of claim 33, wherein said RNA comprises poly A⁺ RNA.

C⁹
37. (Amended) The method of claim 33, wherein said RNA is obtained from a virus.

C¹⁰
39. (Amended) The method of claim 33, wherein said RNA is obtained from a bacterium.

C¹¹
41. (Amended) A method for producing a cytotoxic T lymphocyte (CTL) that is cytotoxic for a cell which presents a pathogen antigen, said method comprising:
providing a T lymphocyte;
contacting said T lymphocyte *in vitro* with the RNA-loaded APC of claim 33; and
maintaining said T lymphocyte under conditions conducive to CTL proliferation, thereby producing a CTL that is cytotoxic for a cell which presents a pathogen antigen.

42. (Amended) An isolated CTL produced by the method of claim 41. D

Cancel claim 43 without prejudice and add new claim 59
in lieu thereof.

C12 44. (Amended) The method of claim 18, wherein the RNA
comprises at least 80% of polyA+ RNA naturally present in a
tumor cell.

C13 51. (Amended) A method for detecting an increase in
tumor-specific or pathogen-specific CTL in a patient, the
method comprising:

i) contacting a first sample of T lymphocyte from
the patient *in vitro* with RNA-loaded APCs that present a
cell-surface tumor or pathogen antigenic epitope encoded by
the RNA, thereby producing a first expanded sample of T
lymphocytes;

ii) administering to the patient the RNA-loaded APCs
that present a cell-surface tumor or pathogen antigenic
epitope encoded by RNA;

iii) subsequent to the administering step, contacting
a second sample of T lymphocytes from the patient *in vitro*
with RNA-loaded APCs that present a cell-surface tumor or
pathogen antigenic epitope encoded by the RNA, thereby
producing a second expanded sample of T lymphocytes;

iv) comparing sensitization of the first expanded

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sample of T lymphocytes with sensitization of the second expanded sample of T lymphocytes, wherein an increased level of sensitization in the second sample, as compared with the first sample, is an indicator of an increase in tumor-specific or pathogen-specific CTL.

C14

53. (Amended) The method of claim 1, wherein the RNA is obtained from frozen tissue.

C15

54. (New) A method for treating a tumor in a patient, said method comprising:

- i) producing a cytotoxic T lymphocyte that is cytotoxic for a cell that presents a tumor antigen, said cytotoxic T lymphocyte being produced by a method comprising the steps of:
- a) providing a T lymphocyte;
 - b) contacting said T lymphocyte *in vitro* with the RNA-loaded antigen presenting cell of claim 13; and
 - c) maintaining said T lymphocyte under conditions conducive to cytotoxic T lymphocyte proliferation, thereby producing said cytotoxic T lymphocyte that is cytotoxic for said cell that presents said tumor antigen, and

ii) administering to said patient a therapeutically effective amount of said cytotoxic T lymphocyte.

55. (New) The method of claim 54, wherein the T lymphocyte is obtained from said patient.

56. (New) The method of claim 54, wherein the T lymphocyte is obtained from a donor patient.

C13
57. (New) The method of claim 54, wherein the RNA is obtained from a tumor of said patient.

58. (New) The method of claim 54, wherein the RNA is obtained from a donor patient.

59. (New) A method for treating a pathogen infection in a patient, said method comprising:

i) producing a cytotoxic T lymphocyte that is cytotoxic for a cell that presents an antigen of said pathogen, said cytotoxic T lymphocyte being produced by a method comprising the steps of

- a) providing a T lymphocyte;
- b) contacting said T lymphocyte *in vitro* with the RNA-loaded antigen presenting cell of claim 33; and